







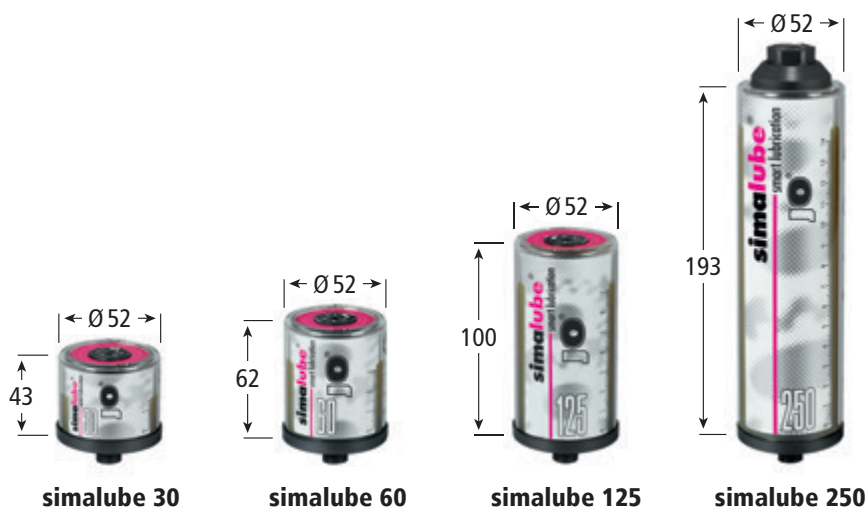
Technical Information

simalube® Automatic lubricator



1. Product Specification

Product	Automatic long-term grease and oil lubricator.
Intended Purpose	simalube® automatic lubricators are used on machines and devices of all types. They may be mounted directly or with the aid of special mounting accessories.
Power generation	Hydrogen gas producing drycell
Working pressure	max. 5 bar
Adjustment	Stepless 1 - 12 months (for standard conditions)
Dispensing rate	See table on page 3
Operating temperature	-20 °C to +55 °C (-4 °F to +131 °F) ambient temperature (Note: grease consistency changes with temperature)
Operation / Usage	Grease dispenser can be installed in any position, even under water. Attention: Do not expose to direct heat.
Risks / Dangers	Despite careful design the possibility that skin comes into contact with lubricant cannot be totally avoided. The lubricant should be removed immediately with water and recommended solvent.
Certifications / Approvals	    II 1G Ex ia IIC T6 Ga II 1D Ex ia IIIC T80 °C Da I M1 Ex ia I Ma
Ingress protection	IP68 (dust- and waterproof)
Usage period	Activation within 2 years of production date
Stock temperature	Recommended at 20 °C ±5 °C (68 °F ±9 °F)



	30 ml	60 ml	125 ml	250 ml
Weight full	~ 82 g	~ 115 g	~ 190 g	~ 335 g
Weight empty	~ 55 g	~ 60 g	~ 75 g	~ 111 g
Connexion thread: G 1/4" x 14 mm				


We are always
pleased to help you!
Just give us a call or
send a message:
+49 (0) 26 52 - 9 39 29 - 0
export@oberrecht.de


All lubricators you can find in
the current JO catalogue or on
www.oberrecht.de

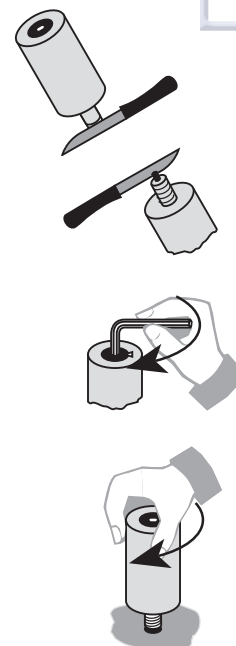
We wish you a smooth
run with your new
simalube® -
lubricator.



2. Assembly and Installation

-  Open the lubricator outlet by cutting off seal or removing plug.

 **Do not remove plug from oil filled units!**
 Cut off the protruding nipple with a knife; a small black point becomes visible (opening now guaranteed).
- To start the **simalube**® lubricator, set the gas generator to the required dispensing time (stepless in months, 1 - 12) using a 3 mm allen key. The lubricator is activated once the dispensing time has been set. Take the required dispensing quantity from the tables on page 3.
- Note the starting date on the label using a waterproof pen.
 Clear grease lines and fill them with the appropriate grease.
 Screw **simalube**® onto the greasing point. If necessary, use accessories shown from page 8 onwards. Apply safety rules.
- Once the set dispensing time has expired, replace empty lubricator with the same type or refill. Before restarting, clear grease lines and fill them with the appropriate grease.
- The gas generator is sufficient to empty the unit **once, irrespective of the dispensing time set.**



Security note: If the lubricator is started without opening the outlet or in case of blocked grease lines within the installation, the pressure in the lubricator can build up approx. 5 bar. At an overpressure of approx. 6 bar the lubricator breaks at the defined breaking point between housing and bottom. The pressure behind the piston releases and oil or grease can come out at the breaking point.

The correct functioning of the lubricator can only be assured if recommended lubricants (see table on page 6) and original **simalube**® accessories are used, and if the installation, operating and maintenance instructions are closely followed. The manufacturer cannot accept any responsibility for damages as a result of ignoring the instructions mentioned above. **Important:** Before putting **simalube**® into operation, fill extensions and the lubrication lines with the appropriate **simalube**® greases (cartouches SL01...SL26) using a grease gun. Use only original accessories.

3. Temperature / Output rate

The output rate can be adjusted as required, depending on the ambient temperature (see table on next page).

Example: You want to set the dispensing time for a 125 ml **simalube**® for 180 days.

Ambient temperature: 20 °C (68 °F)
Setting: 6



Ambient temperature: 55 °C (131 °F)
Setting: 7



Technical Information **simalube**®

simalube 30

Setting at Temperature	Dispensing time (days)	30	90	180	270	360
	ml / day	1.00	0.33	0.17	0.11	0.08
	-20 °C (-4 °F)	+	2	3.5	5.5	7.5
	4 °C (39,2 °F)	+	2.5	5	7.5	10.5
	20 °C (68 °F)	1	3	6	9	12
	40 °C (104 °F)	1	3	6.5	9.5	–
	55 °C (131 °F)	1	3.5	7	10.5	–

- + Use larger dispenser with longer dispensing time
- Smallest possible output rate reached

simalube 60

Setting at Temperature	Dispensing time (days)	30	90	180	270	360
	ml / day	2.00	0.67	0.33	0.22	0.17
	-20 °C (-4 °F)	+	2	4	6.5	8
	4 °C (39,2 °F)	+	2.5	5.5	9	10.5
	20 °C (68 °F)	1	3	6	9	12
	40 °C (104 °F)	1	3	6.5	9.5	•
	55 °C (131 °F)	1	3.5	7	10.5	•

- + Use larger dispenser with longer dispensing time
- Use smaller dispenser with shorter dispensing time

simalube 125

Setting at Temperature	Dispensing time (days)	30	90	180	270	360
	ml / day	4.17	1.39	0.69	0.46	0.35
	-20 °C (-4 °F)	+	2	4	6.5	8.5
	4 °C (39,2 °F)	+	2.5	5.5	8	10.5
	20 °C (68 °F)	1	3	6	9	12
	40 °C (104 °F)	1	3	6.5	9.5	•
	55 °C (131 °F)	1	3.5	7	10	•

- + Use larger dispenser with longer dispensing time
- Use smaller dispenser with shorter dispensing time

simalube 250

Setting at Temperature	Dispensing time (days)	30	90	180	270	360
	ml / day	8.33	2.78	1.39	0.93	0.69
	-20 °C (-4 °F)	++	2	4.5	7.5	9.5
	4 °C (39,2 °F)	++	2.5	5.5	8	10.5
	20 °C (68 °F)	1	3	6	9	12
	40 °C (104 °F)	1	3	6	9	•
	55 °C (131 °F)	1	3.5	6.5	9.5	•

- ++ Use 2-fold adapter
- Use smaller dispenser with shorter dispensing time

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The values relate to laboratory conditions, SL01 with no counterpressure. At low temperatures in particular, the values may vary between one grease type and another. The dispensers must be replaced once the dispensing time set has expired, even if they are not completely empty.

The grease quantity dispensed per day is influenced by:

- counterpressure / resistance from the grease lines
- ambient temperature
- viscosity of the grease

Start-up time:

The lubricator requires a certain start-up time until the lubricant is first dispensed. The start-up time varies in line with the volume dispensed, dispenser size and operating temperature selected. At 20 °C (68 °F) ambient temperature and a dispensing time setting of 12 months, the dispenser outputs the lubricant within one week. The start-up time doubles at low temperatures (-20 °C / -4°F) or with small dispensers (30 ml).

You can reduce the start-up time in such a case by setting a dispensing time on the lubricator of one month for one to two days and then changing to the desired dispensing time.

Calculation Pro:

An online calculation program is available at www.oberrecht.de. This tool calculates the right setting for the **simalube®** lubricator if you enter the precise operating parameters.

Notes:

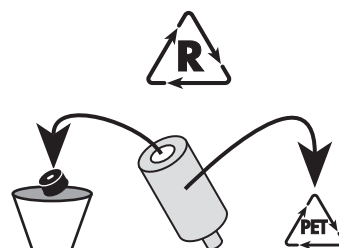
In order for the unit to function reliably, it is important to have clear, filled grease lines. It must be ensured that the grease lines are not blocked. Consequently, the grease lines should always be cleared with a grease gun before starting. The **simalube®** can be re-adjusted or switched off during operation. The values on the gas generator relate to laboratory conditions (see page 2 / 3). Depending on the temperature and setting, it may take several hours (or several days in the case of long-term settings) until the lubricant is first dispensed. The user must check the operation of the **simalube®** regularly.

Grease lines should be no longer than 0.5 m. Recommended bore diameter: 6 - 8 mm. Resistance in grease lines has to be minimized, narrow passages and right angles should be avoided. Use a mounting support in the event of strong vibrations or high accelerations (for accessories, see from page 8 onwards). Use the pressure booster (Part No. 116.1000) **simalube®** IMPULSE with long lubrication lines or high back pressure. The **simalube®** may only be used to supply a **single** grease point. No branches may be made. Once the lubricator is installed and activated, it must not be removed and mounted onto another lubrication point.

4. Recycling Instructions



1. Unscrew gas generator (Ø 21 mm) and dispose of complete unit for battery recycling (see above). **Note:** Do not detach lubricator near an open flame.
2. Dispose of empty housing for plastic recycling. If the lubricator still contains lubricant after use, please dispose of it in accordance with local regulations.



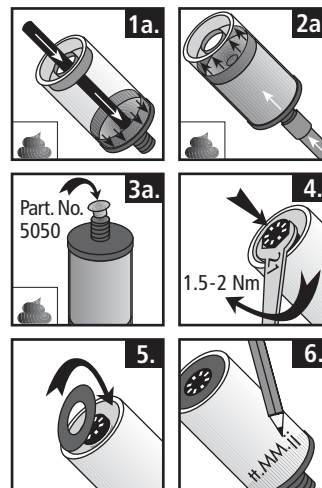
Technical Information **simalube®**

5. Filling and Refilling (for small quantities)

Filling with grease



- 1a. Push piston all the way forward by blowing gently with compressed air or with the aid of a plastic rod (7 mm diameter), towards the bottom or opening.
- 2a. Screw on refill nipple (Part No. 290.3012) and connect grease gun, or screw connector nipple (Part No. 290.3013 or 290.3014) onto grease gun. Keep the dispenser pressed to the adapter during the filling process so that you do not have to screw on the refill nipple again. Press grease into the dispenser. Avoid air bubbles when filling the unit. Continue the filling process until the piston has been pushed all the way back. Do not overfill!
Caution: Lever presses can create pressure of up to 80 bar, which is enough to destroy the dispenser.

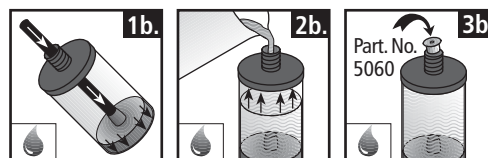


- 3a. Use closing nipple (**green**) if the dispenser is to be stored.
4. Position gas generator (make sure the o-ring is positioned correctly) and attach firmly with a 1.5 - 2.0 Nm torque key. **Always use original simalube® gas generators.**
5. Clip in cover disk.
6. Note grease type and filling date on the label.

Filling with oil



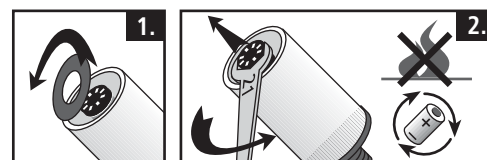
- 1b. Push the piston all the way back (towards the gas generator).
- 2b. Pour in oil through the opening at the bottom.
- 3b. Position non-return valve (yellow, Part No. 290.5060).
4. - 6. Continue as above with grease.



Refilling with grease or oil



1. Remove cover disk.
2. Unscrew gas generator (⌀ 21 mm) and recycle with other batteries. **Note:** Never remove near an open flame! Then continue as above for filling with grease or oil.








Note

To ensure that the **simalube®** lubricator operates reliably, only greases that have been tested and approved for use with the **simalube®** should be used. In particular, it is important to ensure the good stability of the grease against bleeding of the base oil and a low consistency class (max. NLGI 2). No guarantee claims will be accepted when dispensers are filled by the user or not explicitly approved lubricants are used. If in doubt, please contact **Oberrecht GmbH** or their distributor.

6. Lubricants

The standard lubricant range suitable for **simalube®** includes modern high quality lubricants tested and modified for the special requirements of grease and oil dispensers. Datasheets available upon request. Please refer to these datasheets for the instructions / safety regulations of the grease / oil manufacturers.


Lubricator		Temperature range (in the area of lubrication)
Type	Description	
SL01	High performance grease, extremely resistant against water, detergents and caustic soda	-30 / +120 °C
SL02	High performance grease + MoS ₂	-25 / +130 °C
SL04	High temperature grease for long-term lubrication (EP)	-20 / +160 °C
SL06	Water resistant flow grease (EP)	-20 / +120 °C
SL09	Universal grease, readily biodegradable	-20 / +80 / 100 °C 
SL10	Food industry grease (NSF H1)	-40 / +130 °C 
SL12	Very soft food industry grease (NSF H1)	-40 / +130 °C 
SL24	Grease for a wide temperature range (EP)	-30 / +140 °C
SL25	High temperature grease	-20 / +160 °C
SL26	High performance grease (EP)	-20 / +150 °C
SL14	Chain oil EP (Mineral oil)	-10 / +90 °C
SL15	High temperature chain oil EP (Synthetic oil)	-30 / +250 °C
SL16	Machine oil	-20 / +100 °C
SL18	Food grade oil NSF-H1 especially for the bottling industry (Synthetic oil)	-15 / +150 °C 
SL19	Bio chain oil	-15 / +100 °C 

simalube® can also be delivered filled with other lubricants or as an empty unit. Ask for advice. The operation of **simalube®** with oils of different viscosities also is possible.

7. Testing and certification bodies

simalube® has been safety inspected and approved by the following institutions:

- TÜV SÜD Product Service GmbH, Germany, No. Z1 16 12 29499 023
- TÜV SÜD Product Service GmbH, Germany, No. EX2 16 03 29499 020
- DEKRA Certification B.V., Netherlands, No. KEMA 09ATEX0098

-  II 1 G Ex ia IIC T6 Ga
II 1 D Ex ia IIIC T80 °C Da
I M1 Ex ia I Ma



EU Declaration of Conformity


Oberrecht GmbH, "Am Rothen Berg" 1-3,
D-56745 Bell am Laacher See,
declares that the

single point lubricators
simalube® & simalube® multipoint

are designed and manufactured in
accordance with
**Directive 2014/34/EU of the European Parliament
and the Council on the harmonisation of the laws
of the Member States relating to equipment
and protective systems intended for use in
potentially explosive atmospheres.**

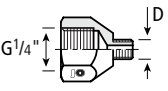
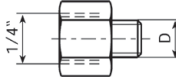
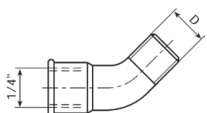
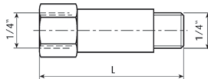
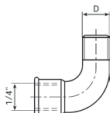
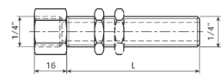
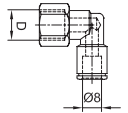
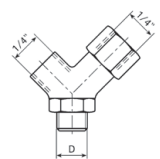
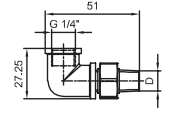
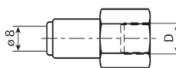
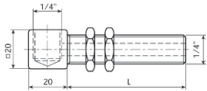
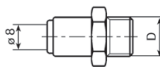
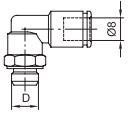

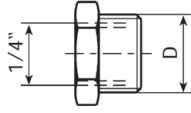
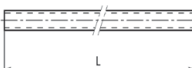
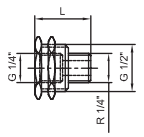

The following standards
have been applied:
EN 60079-0:2012 + A11:2013
EN 60079-11:2012
EN 50303:2000

Notified Body:
DEKRA Certification B.V.
NL-6825 MJ Arnhem
Identification number: 0344
Certificate No.
KEMA 09ATEX0098

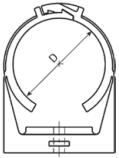
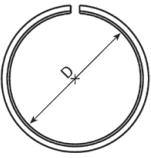
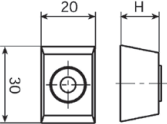
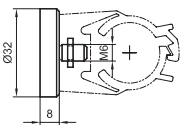

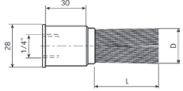
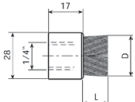
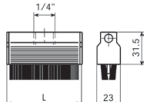
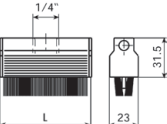
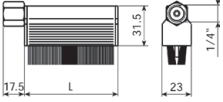
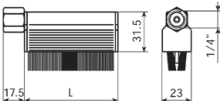
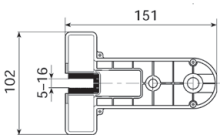
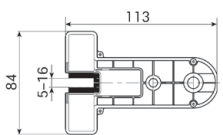
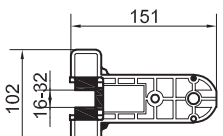
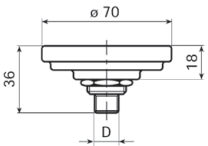
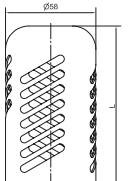
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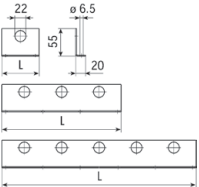

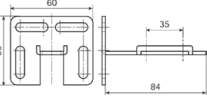

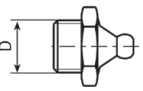
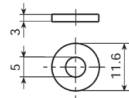
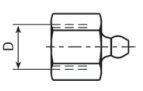

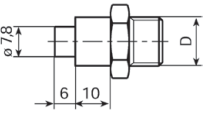
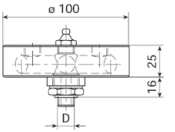

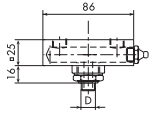
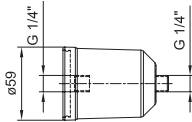
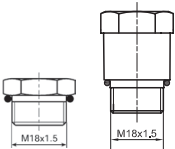

Accessories

Note! Use only original accessories. If you have technically demanding or unusual applications, please contact our Technical Department or your local distributor.

	Reducer No.: 116.0010-M6-MV D: M6		Reducing nipple No.: 290.1020 D: G 1/8" No.: 116.0008 D: G 1/4" No.: 290.1023 D: M8 No.: 290.1024 D: M8 x 1 No.: 290.1025 D: M10 No.: 290.1026 D: M10 x 1 No.: 290.1027 D: M12 No.: 290.1028 D: M12 x 1.5 No.: 290.1121 D: UNF 1/4"
	Bent connection 45° No.: 116.0015 D: R 1/4"		Extension No.: 290.1021 L: 10 mm No.: 290.1040 L: 35 mm No.: 290.1041 L: 50 mm
	Bent connection 90° No.: 116.0016 D: R 1/4"		Screwed connection with hole 25mm, 1 nut / 60 mm, 2 nuts No.: 290.1045 L: 25 mm No.: 290.1046 L: 60 mm
	Elbow rotary No.: 290.1003 D: G 1/4"		Y-manifold contains reduction 116.0008 No.: 116.0012 D: R 1/4"
	Bent connection 90° swiveling No.: 290.1004 D: R 1/4"		Quick connection for hose Ø 8 mm No.: 101.0741-8 D: G 1/4"
	90° connection with thread incl. 2 nuts (only for oil) No.: 290.1005 L: 70 mm		Quick connection for hose Ø 8 mm No.: 101.0340-8 D: R 1/8" No.: 101.0739-8 D: R 1/4" No.: 101.0740-8 D: R 3/8"
	Elbow rotary No.: 290.1007 D: G 1/8" No.: 290.1008 D: G 1/4"		Hose available by the metre No.: 290.2000 / ... m L: per meter Ø 8 / 6 mm
	Connecting nipple No.: 116.0013 D: G 3/8" No.: 116.0014 D: G 1/2"		Hose for temperature up to 260 °C No.: 290.2002 / ... m L: per meter Ø 8 / 6 mm
	Fixation nipple G 1/2" - R 1/4" No.: 290.1015 L: 25 mm		Hose for small bend radius No.: 290.2004 / ... m L: per meter Ø 8 / 6 mm

Technical Information simalube®

	Clamp for simalube® / round brush Plastic No.: 290.2010 D: 50 mm No.: 290.2013 D: 28 mm No.: 290.2015 D: 22 mm
	Adapter for clamp (60 mm) Plastic No.: 290.2012 D: 50 mm
	Distance holder to clamp for round brush 290.2013 No.: 290.2014 H: 15 mm
	Magnetic fixture for clamps No.: 290.2019
	Non-return valve No.: 290.2020 D: G 1/8" No.: 290.2021 D: G 1/4"
	Round brush No.: 290.2034 D x L: Ø 25 x 45 mm
	Round brush short No.: 290.2041 D x L: Ø 25 x 15 mm
	Brush No.: 290.2038 L: 25 mm No.: 290.2035 L: 40 mm No.: 290.2036 L: 70 mm No.: 290.2037 L: 100 mm
	Brush for food applications No.: 290.2038-FN L: 25 mm No.: 290.2035-FN L: 40 mm No.: 290.2036-FN L: 70 mm No.: 290.2037-FN L: 100 mm
	Brush, lateral connection No.: 290.2038-S L: 25 mm No.: 290.2035-S L: 40 mm No.: 290.2036-S L: 70 mm No.: 290.2037-S L: 100 mm
	Brush, lateral connection for food applications No.: 290.2035-SFN L: 40 mm No.: 290.2036-SFN L: 70 mm No.: 290.2037-SFN L: 100 mm
	Elevator brush 5 - 16 mm, height 32 mm No.: 290.2039
	Elevator brush small 5 - 16 mm, height 32 mm No.: 290.2042
	Elevator brush 16 - 32 mm, height 32 mm No.: 290.2044
	Mounting support for all simalube® sizes No.: 290.2080 D: R 1/4"
	Protective cover to mounting support 290.2080 No.: 290.2081 ≤ 125 ml L: 105 mm No.: 290.2085 250 ml L: 195 mm

	Bracket to mounting support simalube® No.: 290.2082 D: 1 x 75 mm No.: 290.2083 D: 3 x 240 mm No.: 290.2084 D: 5 x 390 mm		Closing nipple Plastic No.: 290.5050
	Bracket universally adjustable No.: 290.2800		Non-return valve plug Plastic No.: 290.5060
	Grease nipple for cleaning and filling of grease lines No.: 116.0011-VZ D: R 1/4"		Gasket ring No.: 290.5080
	Refill nipple for refilling of simalube® No.: 290.3012 D: G 1/4"		Grease Cartridge No.: 290.7001 SL01 No.: 290.7002 SL02 No.: 290.7004 SL04 No.: 290.7006 SL06 No.: 290.7009 SL09 No.: 290.7010 SL10 No.: 290.7012 SL12 No.: 290.7024 SL24 No.: 290.7025 SL25 No.: 290.7026 SL26
	Refill nipple to grease gun filler for filling simalube® No.: 290.3013 D: R 1/4" No.: 290.3014 D: R 3/8"		Oil bottle 0.5 l No.: 290.7114 SL14 No.: 290.7115 SL15 No.: 290.7116 SL16 No.: 290.7118 SL18 No.: 290.7119 SL19
	4-fold adapter No.: 290.4100 D: G 1/2" No.: 290.4101 D: G 1/4"		
	2-fold adapter No.: 290.4102 D: G 1/2" No.: 290.4103 D: G 1/4"		simalube® IMPULSE Pressure booster No.: 116.1000
	Gas generator for refilling No.: 220.5004 L: 30 ml No.: 220.5006 L: 60 ml No.: 220.5008 L: 125 ml No.: 220.5010 L: 250 ml		Battery pack No.: 230.5000 Power: 6 V 2,3 AH